

Material Safety Data Sheet

Material Name: Mayco Stim-300

ID: MWI-016

*** Section 1 - Chemical Product and Company Identification ***

Chemical Name: Mayco Stim-300

Product Use: Surfactant

Manufacturer Information

Mayco Wellchem, Inc.
1525 N. Post Oak Road
Houston, TX 77055

Phone: (713) 688-2602
Fax: 713-688-3620
Emergency # 1 (888) 688-4467

*** Section 2 - Composition / Information on Ingredients ***

CAS #	Component	Percent	ACGIH	OSHA
Proprietary	Ethylene oxide-Nonylphenol polymer	Proprietary	Not available	Not available
Proprietary	Alcohols, C12-16, ethoxylated	Proprietary	Not available	Not available
Proprietary	2-Butoxyethanol	Proprietary	20 ppm TWA (skin) - potential for cutaneous absorption	50 ppm TWA; 240 mg/m3 TWA
Proprietary	Methyl alcohol	Proprietary	200 ppm TWA 250 ppm STEL skin - potential for cutaneous absorption	200 ppm TWA; 260 mg/m3 TWA
Not Available	Tridecyl alcohol	Proprietary	Not available	Not available
Not Available	Nonylphenol	Proprietary	Not available	Not available
Proprietary	Ethoxylated nonionic surfactant	Proprietary	Not available	Not available

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Glycol ethers.

Component Information/Information on Non-Hazardous Components

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

*** Section 3 - Hazards Identification ***

Emergency Overview

WARNING This product is irritating to the respiratory system. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination. This product may cause an allergic skin reaction. May cause blindness.

Potential Health Effects: Eyes

This product may be severely irritating to the eyes. Overexposure to methanol may damage the optic nerve resulting in permanent loss of vision or total blindness.

Potential Health Effects: Skin

This product may be fatal if it is absorbed through the skin. This product may cause irritation to the skin. May cause allergic skin reactions in sensitive individuals following repeated or prolonged use. Symptoms may include itching, dryness, and scaling.

Potential Health Effects: Ingestion

This product may be harmful or fatal if swallowed. Ingestion of this product may cause nausea, vomiting and diarrhea. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision. Ingestion may cause liver and kidney damage and blood disorders. This product may cause blindness if it is swallowed.

Potential Health Effects: Inhalation

Inhalation of vapors or mists of the product may be irritating to the respiratory system. Excessive inhalation of this product may cause headache, dizziness, blurred vision, nausea and vomiting.

Medical Conditions Aggravated

Preexisting eye, skin and respiratory disorders. Preexisting liver and kidney disorders. Disorders of the blood.

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HMIS Ratings: Health: 2* Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 4 - First Aid Measures ***

First Aid: Eyes

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

First Aid: Skin

For skin contact, flush with large amounts of water. If irritation persists, get medical attention. For contact with large amounts, seek immediate medical attention. Immediately take off all contaminated clothing. Wash contaminated clothing before reuse.

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

First Aid: Inhalation

If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

*** Section 5 - Fire Fighting Measures ***

Flash Point: 130°F (54°C)

Upper Flammable Limit (UFL): Not Applicable

Auto Ignition: Not Available

Rate of Burning: Not Available

General Fire Hazards

This product is combustible above the flashpoint. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition.

Hazardous Combustion Products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA Ratings: Health: 2 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Containment Procedures

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Remove sources of ignition. Block any potential routes to water systems.

Clean-Up Procedures

Ventilate the contaminated area. Eliminate ignition sources including sources of electrical, static or frictional sparks. Do not allow the spilled product to enter public drainage system or open water courses. Wear appropriate protective equipment and clothing during clean-up. Absorb spill with inert material. Shovel material into appropriate container for disposal.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Avoid skin contact with the spilled material. Regulations vary. Consult local authorities before disposal.

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*** Section 7 - Handling and Storage ***

Handling Procedures

Avoid breathing vapors or mists of this product. Do not get this material in your eyes, on your skin, or on your clothing. Wash thoroughly after handling. Use non-sparking tools when opening or closing containers. Use this product with adequate ventilation. Keep this product from heat, sparks, or open flame. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode.

Storage Procedures

Keep the container tightly closed and in a cool, well-ventilated place. Do not handle or store near an open flame, heat or other sources of ignition.

*** Section 8 - Exposure Controls / Personal Protection ***

Exposure Guidelines

Follow all applicable exposure limits. (See Section 2)

Engineering Controls

Ventilation should effectively remove and prevent buildup of any vapor or mist generated from the handling of this product.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear chemical goggles; face shield (if splashing is possible).

Personal Protective Equipment: Skin

Use impervious gloves. Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves. Use of an impervious apron is recommended.

Personal Protective Equipment: Respiratory

If ventilation is not sufficient to effectively prevent buildup of aerosols or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Personal Protective Equipment: General

Eye wash fountain and emergency showers are recommended.

*** Section 9 - Physical & Chemical Properties ***

Appearance:	Clear	Odor:	Slight alcohol
Physical State:	Liquid	pH:	4 - 7
Vapor Pressure:	98 PSIA @108°F	Vapor Density:	1.693
Boiling Point:	198°F (89°C)	Melting Point:	Not available
Solubility (H2O):	Completely miscible	Specific Gravity:	0.98-1.05
Percent Volatile:	65%		

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

Stable under normal conditions.

Chemical Stability: Conditions to Avoid

Keep away from heat, ignition sources and incompatible materials.

Incompatibility

This product may react with oxidizing agents.

Hazardous Decomposition

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Hazardous Polymerization

Will not occur.

*** Section 11 - Toxicological Information ***

Acute and Chronic Toxicity

A: General Product Information

No information available for the product.

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Methanol when splashed in the eyes can cause superficial lesions of the cornea. Prolonged or repeated skin contact will cause dermatitis, erythema, and scaling. Although methanol poisoning occurs primarily through ingestion, symptoms can also occur from inhalation or absorption through the skin. Cases of vision impairment have been reported from absorption. These changes are marked by blurred or double vision, changes in color perception to constricted visual fields and complete blindness. Patients who recover from methanol poisoning may be permanently blind. Exposure to vapor concentrations ranging from 365 to 3080 ppm may lead to blurred vision, headache, dizziness, and nausea. Symptoms of methanol exposure include: optic neuropathy, metabolic acidosis, headache, shortness of breath, dizziness, vertigo and respiratory depression. Overexposure to methanol may damage the optic nerve resulting in permanent loss of vision or total blindness. Inhalation of vapors can cause respiratory tract irritation, headache, dizziness, weakness, nausea, and possibly unconsciousness. Severe exposure may cause convulsions, respiratory depression, and death from respiratory failure.

Ethylene glycol n-butyl ether, also known as 2-butoxyethanol, is harmful upon ingestion, inhalation, or skin absorption. Ethylene glycol n-butyl ether is a glycol ether which may result in CNS depression characterized by headache, drowsiness, weakness, slurred speech, stuttering, loss of coordination and judgement, tremor, blurred vision, personality changes, and albuminuria. Glycol ethers may also result in liver or kidney damage, and hemolytic effects.

The ethoxylated alcohol found in this product is severely irritating to the eyes. It is also moderately irritating to the skin and slightly toxic if absorbed through the skin. It also may cause allergic contact dermatitis.

Contact of the skin with tridecyl alcohol results in moderate irritation. Liquid contact with the eyes causes severe irritation and possible eye damage.

B: Component Analysis - LD50/LC50

Ethylene oxide-Nonylphenol polymer (Proprietary)

MD0900000:Glycols, polyethylene, mono(nonylphenyl) ether (10/1/97)

Oral LD50 Rat : 1310 mg/kg

Oral LD50 Mouse : >50 gm/kg

Dermal LD50 Rabbit : 2 mL/kg

2-Butoxyethanol (Proprietary)

Inhalation LC50 Rat : 450 ppm/4H

Inhalation LC50 Mouse : 700 ppm/7H

Oral LD50 Rat : 470 mg/kg

Oral LD50 Mouse : 1230 mg/kg

Dermal LD50 Rabbit : 220 mg/kg

Methyl alcohol (Proprietary)

Inhalation LC50 Rat : 64000 ppm/4H

Oral LD50 Rat : 5628 mg/kg

Oral LD50 Mouse : 7300 mg/kg

Dermal LD50 Rabbit : 15800 mg/kg

Carcinogenicity

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

None of this product's components are listed by IARC, OSHA, or NTP.

Chronic Toxicity

No information available for the product.

Chronic inhalation or skin absorption of methanol may cause liver, kidney, central nervous, cardiovascular system damage, or reproductive and developmental effects.

Epidemiology

No information available for the product.

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Neurotoxicity

No information available for the product.

Methyl alcohol can produce damage to the optic nerve and central and motor nerves.

Mutagenicity

No information available for the product.

In developmental animal studies, methanol produced malformations in mice and rats following inhalation during gestation; slight maternal toxicity was also observed.

Reproductive effects were seen in the fetus of laboratory animals exposed to ethylene glycol monobutyl ether at doses which caused toxic effects to the mother.

Teratogenicity

No information available for the product.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Ethylene oxide-Nonylphenol polymer (Proprietary)

MD0900000:Glycols, polyethylene, mono(nonylphenyl) ether (10/1/97)

Oral LD50 Rat : 1310 mg/kg

Oral LD50 Mouse : >50 gm/kg

Dermal LD50 Rabbit : 2 mL/kg

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Methyl alcohol (Proprietary)

Inhalation LC50 Rat : 64000 ppm/4H

Oral LD50 Rat : 5628 mg/kg

Oral LD50 Mouse : 7300 mg/kg

Dermal LD50 Rabbit : 15800 mg/kg

Environmental Fate

No information available for the product.

* * * Section 13 - Disposal Considerations * * *

US EPA Waste Number & Descriptions

A: General Product Information

If discarded, as supplied, this product may meet the definition of a RCRA ignitable waste, D001. Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers

Methyl alcohol (Proprietary)

RCRA: waste number U154; (Ignitable waste)

Disposal Instructions

Regulations vary. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

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*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Domestic Bulk -Combustible liquid, n.o.s.
Domestic Drum – N.A.

Hazard Class: Domestic Bulk - Combustible liquid, n.o.s.
Domestic Drum – N.A.

UN/NA #: Domestic Bulk - NA1993
Domestic Drum – N.A.

Packing Group: Domestic Bulk - PGIII
Domestic Drum – N.A.

Required Label(s): None

Additional Info.: The classification of this material as listed above applies only to domestic ground transportation for non-bulk containers. If shipped internationally or by other modes other classifications may apply.

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

No additional information available.

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

2-Butoxyethanol (Proprietary)

SARA 313: form R reporting required for 1.0% de minimis concentration; Chemical Category N230; (applies to R-(OCH₂CH₂)_n-OR^{'''} ethers, where n = 1,2, or 3^{'''}; R=alkyl C7 or less or R = phenyl or alkyl subst. phenyl; R^{'''} = H or alkyl C7 or less, or OR^{'''} consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate) (related to Glycol ethers)

CERCLA: (Includes mono- and di- ethers of ethylene glycol; diethylene glycol and triethylene glycol R-(OCH₂CH₂)_n-OR["] where n = 1 2 or 3; R = alkyl or aryl groups; R["] = R h or groups which when removed yield glycol ethers with the structure R-(OCH₂CH₂)_n-OH. Polymers are excluded from glycol category); Statutory RQ = 1 pound (.454 kg); no final RQ is being assigned to the generic or broad class (related to Glycol ethers)

Methyl alcohol (Proprietary)

SARA 313: form R reporting required for 1.0% de minimis concentration

CERCLA: final RQ = 5000 pounds (2270 kg)

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS #	CA	FL	MA	MN	NJ	PA
2-Butoxyethanol	Proprietary	Yes	Yes	Yes	Yes	Yes	Yes
Methyl alcohol	Proprietary	Yes	Yes	Yes	Yes	Yes	Yes

Other Regulations

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List.

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B: Component Analysis – Inventory

Component	CAS #	TSCA	DSL	EINECS
Water	Proprietary	Yes	Yes	Yes
Alcohols, C12-16, ethoxylated	Proprietary	Yes	Yes	No
Ethylene oxide-Nonylphenol polymer	Proprietary	Yes	Yes	No
2-Butoxyethanol	Proprietary	Yes	Yes	Yes
Methyl alcohol	Proprietary	Yes	Yes	Yes
Ethoxylated nonionic surfactant	Proprietary	Yes	Yes	No

C: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
2-Butoxyethanol	Proprietary	1%; English Item 721; French Item 824
Methyl alcohol	Proprietary	1%; English Item 1012; French Item 183

* * * Section 16 - Other Information * * *

Other Information

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry. HEPA = High Efficiency Particulate Air

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This is the end of MSDS # MWI-016